

February 13, 2003

Mr. G. William Pennington
Chief, Energy Efficiency Program
California Energy Commission
1516 9th Street, MS 28
Sacramento, California 95814-5512

**RE: Comments on Proposed Revisions to 2005 Building Energy Efficiency Standards,
Workshop Draft #3, 2/4/03 - CTI Certification Requirement for Heat Rejection Equipment
(California Building Code Title 24, Part 6)**

Dear Mr. Pennington:

The purpose of this letter is to convey the strong support of York International Corporation to the California Energy Commission for amending the 2005 Building Energy Efficiency Standards to include a requirement that all cooling towers be certified as specified in CTI STD-201. York International is the largest independent supplier of heating, ventilating, air-conditioning, and refrigeration equipment in the United States, and is a leading competitor in the industry internationally.

Draft 3 of the 2005 Building Standards dated February 2003 has been revised to require Cooling Technology Institute certification of energy performance for cooling towers with a capacity of 300 gpm or larger at the conditions listed in Table 112-H of the Standards. For the following reasons, York endorses the Commission's application of the CTI third-party certification requirement to cooling tower energy performance. Furthermore, York encourages the Commission to remove its proposed 300 gpm limitation and extend the CTI certification requirement to all cooling towers within the scope of CTI STD-201, regardless of size.

As a major chiller manufacturer, York is well aware of the relationship between the operation of chillers and the cooling towers that reject the heat from the chillers to the atmosphere. Optimal system performance and minimal energy use depend on the chillers and the cooling towers both being properly sized. If the cooling towers in a building system are designed to a specific capacity, but in fact deliver less than their design capacity, both the chillers and the cooling towers in the system will be forced to consume more energy to reject building heat. Since the chillers in a building system consume much more energy than the cooling towers, the energy penalty from undersized cooling towers will be substantially magnified in the chillers. The use of uncertified cooling towers can result in excessive energy consumption in this fashion without detection because the building occupants do not notice any change in system performance, and the system appears to operate normally despite the fact that it is consuming more energy than its designers intended.

All of the chiller manufacturers have submitted their equipment lines to third party energy performance certification requirements administered by the Air Conditioning and Refrigeration Institute for many years. Building owners, design engineers and chiller manufacturers all recognize the practical benefits of ARI certification. Owners get the chiller energy performance they intended to purchase, design engineers know that the chillers will deliver the specified energy performance, and manufacturers know they are competing on an equal footing with the other chiller manufacturers because the competitors' equipment also is certified under ARI Standard 550/590.

York has seen and experienced the energy-saving benefits of third-party certification of the energy performance of chillers. We believe that significant building system energy performance improvements are achievable if third-party certification becomes mandatory for cooling towers. Therefore, York urges the Commission to retain the CTI STD-201 certification requirement for all cooling towers in the 2003 Building Standards.

The February 2003 Draft 3 Building Standards include a proposal in Table 112-H to limit the CTI STD-201 certification requirement to cooling towers with a capacity of 300 gpm or greater (under specified conditions). York believes that the overall building system benefits of third-party energy performance certification for cooling towers apply equally to cooling towers with a capacity of less than 300 gpm, and we see no logical basis for this arbitrary cut-off point. York encourages the Commission to amend future drafts of the Building Standards to make CTI STD-201 a requirement for all cooling towers covered by the terms of that test procedure, regardless of size.

Thank you for considering our comments on this portion of the 2005 Building Energy Efficiency Standards. Please contact me if you have any questions about York's comments.

Sincerely,

YORK International Corporation

A handwritten signature in blue ink, appearing to read 'Iain Campbell', is written over a horizontal line.

Iain Campbell
President
YORK Americas